

**CLASSIFYING TACHYARRHYTHMIA USING TIME INTERVAL
BETWEEN VENTRICULAR DEPOLARIZATION
AND MITRAL VALVE CLOSURE**

Abstract

5 A cardiac rhythm management system measures a time interval between a first fiducial marker indicative of a ventricular depolarization (e.g., a Q-wave, an R-wave, etc.) and a second fiducial marker indicative of a subsequent mitral valve closure (MVC) occurring during the same cardiac cycle. Such time intervals are used for detecting atrioventricular (AV) dissociation. The AV dissociation may, in
10 turn, be used for discriminating between a supraventricular tachyarrhythmia (SVT) and a ventricular tachyarrhythmia (VT) or for any other diagnostic or therapeutic purpose. The AV dissociation and/or SVT/VT discrimination information may be communicated from an implantable cardiac rhythm management device to an external interface and/or used to determine the nature of therapy delivered to the
15 subject. In a further example, amplitudes indicative of the MVCs are also used for determining whether AV dissociation exists.